

The partial response to first generation somatostatin analogues guides the choice and may predict the outcome of second line therapies with pasireotide lar: data from a real life experience

AUTHORS

Chiloiro Sabrina 1-2, Costa Denise 3, Lauretta Rosa 4, Mercuri Valeria 3, Sbardella Emilia 3, Samperi Irene 5, Appetecchia Marialuisa 4, Bianchi Antonio 1-2, Giampietro Antonella 1-2, Gargiulo Patrizia 3, Isidori Andrea M 3, Poggi Maurizio 5, Pontecorvi Alfredo 1-2, De Marinis Laura 1-2.

AFFILIATIONS

1 Department of Translational Medicine and Surgery, Università Cattolica del Sacro Cuore, 00168 Roma, Italy.
 2 UOC Endocrinology and Diabetology, Fondazione Policlinico Universitario A. Gemelli IRCCS, 00168 Roma, Italy.
 3 Department of Experimental Medicine, Endocrinology-Pituitary Disease, "Sapienza" University of Rome, Roma, Italy
 4 Oncological Endocrinology Unit, IRCCS Regina Elena National Cancer Institute, Roma, Italy
 5 Endocrine-Metabolic Unit, Sant'Andrea University Hospital, Rome, Italy.

INTRODUCTION

The treatment of acromegaly resistant to first generation somatostatin analogues (first gen-SSA) is often difficult. The aim of this study is to investigate the role of partial response and resistance to first gen-SSA in the choice of second line treatments.

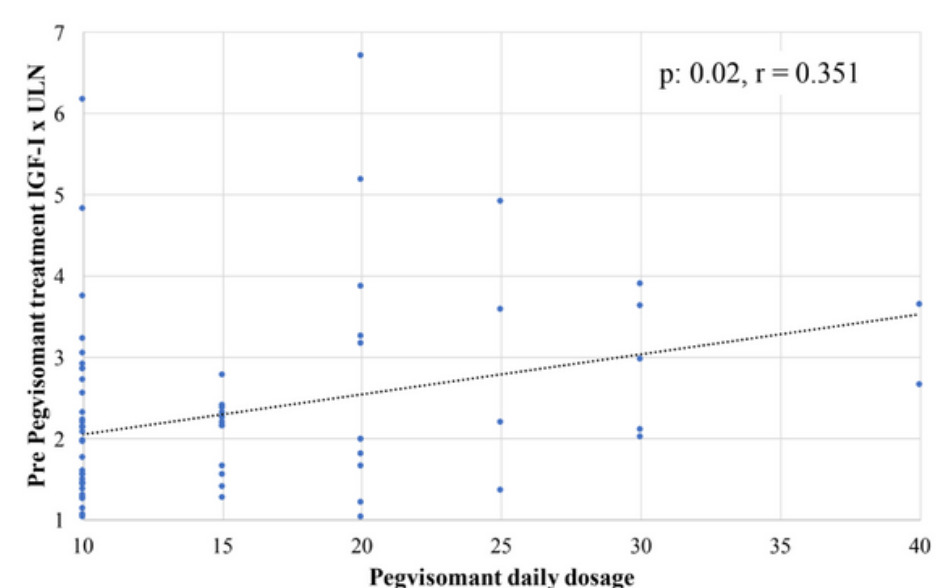
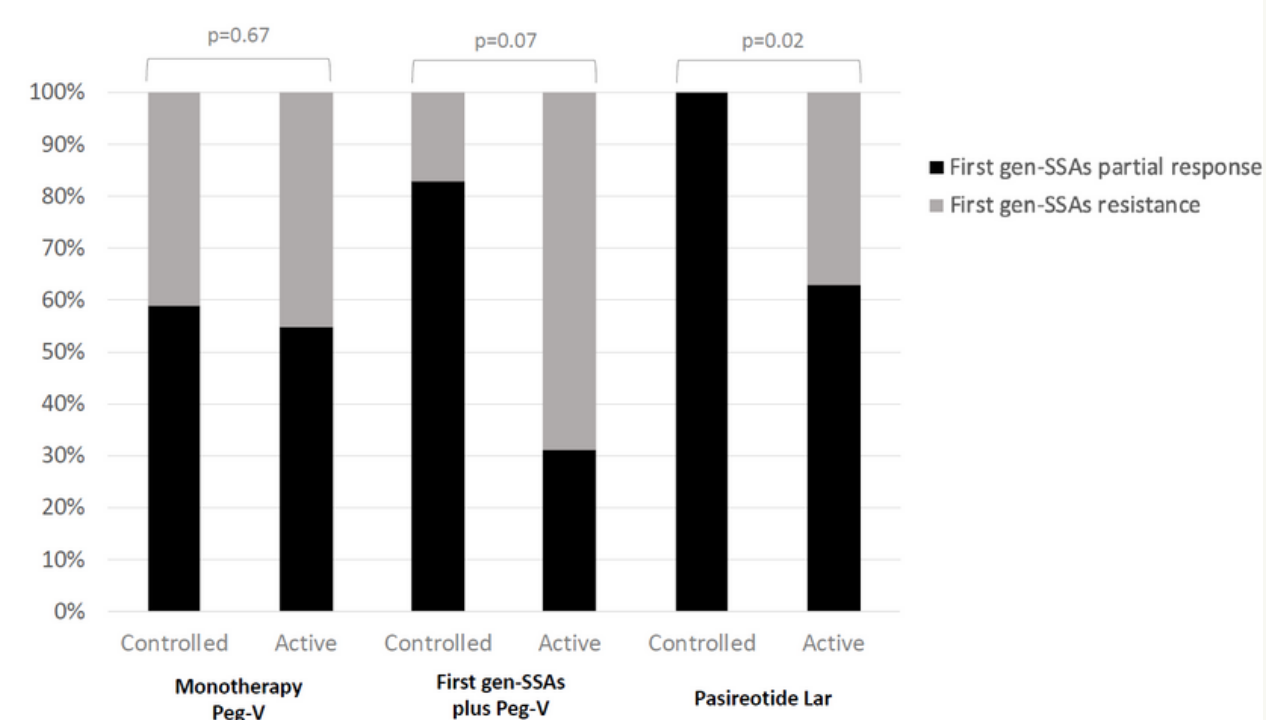
RESULTS

Thirty-three patients (33%) were treated with m-Peg-V, 36 (36%) with c-Peg-V and 31 with Pasi-Lar (31%). According to logistic regression, m-Peg-V was chosen in older patients ($p=0.01$) with not-invasive adenomas ($p=0.009$), c-Peg-V therapy in younger patients ($p=0.001$) with invasive adenomas ($p=0.02$), Pasi-Lar was in invasive adenomas ($p=0.01$) and in patients partially responsive to first-gen SSA ($p=0.01$). The last follow-up, 68 patients (68%) reached the acromegaly control: 22 with m-Peg-V (32.4%), 23 with c-Peg-V (33.8%) and 23 with Pasi-Lar (33.8%).

Patients non-responsive to c-Peg-V had higher IGF-I levels (median $3.2 \times$ ULN, IQR: 1.6, $p<0.001$) and required higher Peg-V dosage (median 30 mg/daily IQR: 10, $p=0.002$) as compared to responsive patients (median IGF-I \times ULN: 2.1 IQR: 1.4; median Peg-V dosage 20 mg/daily IQR: 10). All patients responsive to Pasi-Lar were partially responsive to first gen-SSAs ($p=0.02$).

PATIENTS AND METHODS

A retrospective and multicenter study was conducted on 100 SSA-resistant acromegaly patients and treated with Pasireotide Lar (Pasi-Lar), Peg-V in monotherapy (m-Peg-V) or in combination with first gen-SSA (c-Peg-V).



DISCUSSION

Our data showed that c-Peg-V and Pasi-Lar are chosen for the treatment of invasive tumors. The partial response to first gen-SSA seems to be the main determinant for the choice of Pasi-Lar and positively predicts the treatment outcome.

